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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO |
|---|----------------|----------------------|---------------------|---------------------------------------|
| 08/838,452 | 04/07/1997 | WARREN M. FARNWORTH | 91-62.17 | 8883 |
| 7: | 590 06/11/2002 | | | |
| STEPHEN A GRATTON | | | EXAMINER | |
| 2764 SOUTH BAUN WAY LAKEWOOD, CO 80228 | | | KARLSEN, ERNEST F | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2829 | · · · · · · · · · · · · · · · · · · · |

DATE MAILED: 06/11/2002

Please find below and/or attached an Office communication concerning this application or proceeding.



| | 08/838452 FARNWORTH ET AL |
|--|--|
| Office Action Summary | Examiner, Group Art Unit |
| | E. KARLSEN 2829 |
| -The MAILING DATE of this communication appears | on the cover sheet beneath the correspondence address— |
| P riod for Reply | 2 |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO OF THIS COMMUNICATION. | EXPIRE MONTH(S) FROM THE MAILING DATE |
| from the mailing date of this communication. If the period for reply specified above is less than thirty (30) days, a refull 16 NO period for reply is specified above, such period shall, by default, Failure to reply within the set or extended period for reply will, by statutions. | |
| Status | 11 28 2007 |
| Responsive to communication(s) filed on | H Q, QUQ |
| ☐ This action is FINAL. | |
| Since this application is in condition for allowance except accordance with the practice under Ex parte Quayle, 1935. | or formal matters, prosecution as to the merits is closed in C.D. 1 1; 453 O.G. 213. |
| Disposition of Claims | |
| Claim(s) 70 0 3 70 7 70 7 7 7 7 7 7 7 7 7 7 7 7 | is/are pending in the application. is/are withdrawn from consideration. |
| | |
| \bigcirc Claim(s) 78-82, 87, 88, 90-9. | is/are allowed. |
| | |
| □ Claim(s) | • |
| □ Claim(s) | are subject to restriction or election requirement |
| Application Papers ☐ The proposed drawing correction, filed on | • |
| ☐ The drawing(s) filed on is/are object | ** |
| | to by the Examiner |
| □ The specification is objected to by the Examiner. □ The oath or declaration is objected to by the Examiner. | |
| | |
| Priority under 35 U.S.C. § 119 (a)-(d) | |
| ☐ Acknowledgement is made of a claim for foreign priority ur | der 35 U.S.C. § 119 (a)–(d). |
| ☐ All ☐ Some* ☐ None of the: | and the same of th |
| ☐ Certified copies of the priority documents have been re | , |
| □ Certified copies of the priority documents have been re □ Copies of the certified copies of the priority documents | |
| in this national stage application from the International | |
| *Certified copies not received: | |
| Attachment(s) | • |
| | D Int. minus Commerces STO 440 |
| ☐ Information Disclosure Statement(s), PTO-1449, Paper No(| • |
| Notice of Reference(s) Cited, PTO-892 | □ Notice of Informal Patent Application, PTO-152 |
| ☐ Notice of Draftsperson's Pat nt Drawing R view, PTO-948 | □ Oth r |
| Office Ac | ion Summary |

U.S. Patent and Trademark Office PTO-326 (Rev. 11/00)

Part of Paper No. 50

Serial Number: 09/838,452

Art Unit: 2858

- Due to the location of a new reference the Final Rejection of October 5, 2001 is 1. withdrawn and the following substituted therefor:
- Claims 83, 89, 94 and 95 are withdrawn from further consideration by the examiner, 37 2. CFR 1.142(b) as being drawn to a non-elected invention and/or species. Election was made without traverse in Paper No. 22.
- The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the 3. basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

- 4. (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.
- 5. Claims 78-82, 87, 88, 90-93 and 96-98 are rejected under 35 U.S.C. 102(e) as being fully anticipated by Agahdel et al.
- The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness 6. rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 7. Claims 78-82, 87, 88, 90-93 and 96-98 are rejected under 35 U.S.C. 103(a) as being unpatentable over Malhi et al '190 or Elder et al '850 in a first set in view of Nakano in a second set and Blonder et al or Bindra et al in a third set.

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The first set shows all the major elements of the claimed invention except for the specific contacts and a clamping mechanism producing a specific force range. The first set does have a clamping mechanism. The second set shows a contact of the type claimed except it has a single raised portion instead of plural raised portions. The third set shows the use of contacts with plural raised portions. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have adapted the contact structure of the second set modified to have plural raised portions in accord with the third set to the apparatus of the first set because one of ordinary skill in the art would realize that so doing would result in better contact being made. The force ranges claimed are considered obvious to one skilled in the art and would be scaled appropriately for that being tested. Applicants' arguments that Nakano has no clamping mechanism are contested by the examiner. No drawing exists in Nakano showing a clamping mechanism, but Nakano indicates that the probe of figure 2a "butts up against pad 25" and "deep scoring of pad 25 by probe contact 22 is prevented". (See page 5, lines 17 plus of Nakano et al.) Something has to force the probe against that being tested. It might be a weight, a press or a clamp. All would seem equivalent and obvious to one skilled in the art. Note that the first set uses clamps. Both Blonder et al and Bindra et al must use something akin to a clamp to hold the parts together. Anything that is held together is "clamped". The size of the "clamp" is not relevant.

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. Claims 78-82, 87, 88, 90-93 and 96-98 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakano in a first set in view of Blonder et al or Bindra et al in a second set.

The references were all discussed above. Note Figure 4 of the first set where a plate 40 bears a substrate 10. The plate 40 has external contacts 41. Lines 3 and 4 of page 2 of the first set state that wafers or chips may be tested. It would have been obvious to one of ordinary skill in the art at the time of the invention to have adapted raised portion features of the contacts of the second set to the apparatus of the first set because one skilled in the art would realize that such would enable better contact. One skilled in the art would realize that the chip and the test probe would have to be held together somehow, as by a clamp mechanism. One skilled in the art would apply a force sufficient to make good contact and not so great as to destroy that being tested. Applicants' claimed ranges fall within that category.

10. Applicants argue the rejections as if the references stand alone. The rejection in each of the above rejections is a rejection based on a combination of references. In the rejection of paragraph 7 the rejection is that with the teaching of the second set and third set it would be obvious to modify the first set to have penetration limiting contacts as in the second set and to have plural penetrating contacts as shown by the penetration limiting plural contacts of the third set. The rejection of paragraph 9 drops the first set of the rejection of paragraph 7 and uses just the second set and the third set of paragraph 7 which in the rejection of paragraph 9 became the

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are both clamps.

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first set and second set. With regard to the argument that a press with a hydraulic cylinder is not a clamp, it is the examiner's position that such a device would be a clamp. A clamp is merely a device for compressing structural or mechanical parts. The worlds largest press and a paper clip

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness 11.

rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the

manner in which the invention was made.

Claims 78-82, 87, 88, 90-93 and 96-98 are rejected under 35 U.S.C. 103(a) as being 12.

unpatentable over Agahdel et al.

It would have been obvious to one of ordinary skill in the art to apply a force magnitude to the apparatus of Agahdel et al and to use dimensions in the structure of Agahdel et al such that

proper results could be obtained without damage to that which is being tested.

Karlsen/ds

06/09/02

Thanken

PRIMARY EXAMINER